

~~2000~~ Rec'd PCT/PTO 02 FEB 2001

FORM PTO-1390 REV. 5-93		US DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEYS DOCKET NUMBER P01,0010
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371			U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 09/762259
INTERNATIONAL APPLICATION NO. PCT/EP99/05651	INTERNATIONAL FILING DATE 04 AUGUST 1999	PRIORITY DATE CLAIMED 05 AUGUST 1998	
TITLE OF INVENTION METHOD FOR ADMINISTERING A SERVICE FOR A SUBSCRIBER			
APPLICANT(S) FOR DO/EO/US RENATE ZYGAN-MAUS			
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:			
1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay. 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of International Application as filed (35 U.S.C. 371(c)(2)) - drawings attached. a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US) 6. <input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)) - drawings attached. 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input checked="" type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11. to 16. below concern other document(s) or information included: 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98; (PTO 1449, Prior Art, Search Report, 05 References). 12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included. (SEE ATTACHED ENVELOPE) 13. <input checked="" type="checkbox"/> Amendment "A" Prior to Action and Appendix "A". <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input checked="" type="checkbox"/> A substitute specification and substitute specification mark-up. 15. <input checked="" type="checkbox"/> A change of address letter attached to the Declaration. 16. <input checked="" type="checkbox"/> Other items or information: a. <input checked="" type="checkbox"/> Request for Approval of Drawing Additions, 1 sheet, single Figure. b. <input checked="" type="checkbox"/> Appointment of Associate Power of Attorney c. <input checked="" type="checkbox"/> EXPRESS MAIL #EL655302775US dated February 2, 2001.			

U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.5)

INTERNATIONAL APPLICATION NO.

ATTORNEY'S DOCKET NUMBER

PCT/EP99/05651

P01,0010

17. ☒ The following fees are submitted:

BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5):

Search Report has been prepared by the EPO or JPO \$860.00

International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) .. \$690.00

No international preliminary examination fee paid to USPTO (37 C.F.R. 1.482) but international search fee paid to USPTO (37 C.F.R. 1.445(a)(2)) \$710.00

Neither international preliminary examination fee (37 C.F.R. 1.482) nor international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO \$1000.00

International preliminary examination fee paid to USPTO (37 C.F.R. 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) \$ 100.00

ENTER APPROPRIATE BASIC FEE AMOUNT =

CALCULATIONS

PTO USE ONLY

\$ 860.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 C.F.R. 1.492(e)).

\$

Claims

Number Filed

Number Extra

Rate

Total Claims

06

- 20 =

0

X \$ 18.00

\$

Independent Claims

02

- 3 =

0

X \$ 80.00

\$

Multiple Dependent Claims

\$270.00 +

\$

TOTAL OF ABOVE CALCULATIONS =

\$ 860.00

Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 C.F.R. 1.9, 1.27, 1.28)

\$

SUBTOTAL =

\$ 860.00

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).

\$

TOTAL NATIONAL FEE =

\$ 860.00

Fee for recording the enclosed assignment (37 C.F.R. 1.21(h). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property

+

TOTAL FEES ENCLOSED =

\$ 860.00

Amount to be refunded

\$

charged

\$

a. ☒ A check in the amount of \$ 860.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-1519. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

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NAME

45,877

Registration Number

09/762259

JC05 Rec'd PCT/PTO 02 FEB 2001

BOX PCT

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE
OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
UNDER THE PATENT COOPERATION TREATY--CHAPTER II

5

PRELIMINARY AMENDMENT A

PRIOR TO ACTION

APPLICANT(S): RENATE ZYGAN-MAUS
ATTORNEY DOCKET NO.: P01,0010
INTERNATIONAL APPLICATION NO: PCT/EP99/05651
INTERNATIONAL FILING DATE: 04 AUGUST 1999
INVENTION: METHOD FOR ADMINISTERING A SERVICE FOR A
SUBSCRIBER

10

Assistant Commissioner for Patents,
Washington D.C. 20231

Sir:

15

Applicants herewith amend the above-referenced PCT application, and
request entry of the Amendment prior to examination on the United States
Examination Phase.

IN THE CLAIMS:

20

On page 6:

replace line 1 with --WHAT IS CLAIMED IS:--;

Please replace original claims 1-6 with the following rewritten claims 1-6,
referring to the mark-ups in Appendix A.

25

1. (Amended) A method for administering a function of a service, comprising the
steps of:

accepting a request for administration of said function via a mobile network
terminal device of a mobile network subscriber;
identifying said mobile network subscriber;

instructing, following a successful identification, said mobile network subscriber that said service should now be informed of a connection number of a fixed network terminal device for said administration of said function;

allocating a connection number communicated after instructing said mobile
5 network subscriber to said mobile network subscriber; and

controlling a handling of a call initiated from said fixed network terminal device via said service, said call being allocated to said mobile network subscriber with assistance of said connection number of said fixed network, dependent on a profile of said mobile network subscriber.

10

2. (Amended) The method according to claim 1, further comprising the step of informing said mobile network subscriber of a selection code that is to be additionally employed given use of said fixed network terminal device via said service.

15

3. (Amended) The method according to claim 1, further comprising the step of automatically de-registering said fixed network terminal device that has been employed after expiration of a prescribable time or by an explicit de-registration procedure via said mobile network terminal device, resulting in a loss of a property of being able to be used by said mobile network subscriber according to said
20 subscriber's profile.

20

4. (Amended) A service logic for control of a service, comprising:
means for accepting a request for administering a function of said service via a mobile network terminal device of a mobile network subscriber;

25

means for subsequently identifying said mobile network subscriber;
means for instructing, following a successful identification, said mobile network subscriber that it should now be informed of a connection number of a fixed network terminal device for the administration of said function;

means for allocating a connection number communicated after instructing
30 said mobile network subscriber to said mobile network subscriber; and

means for controlling a handling of a call initiated from said fixed network terminal device via said service, said call being allocated to said mobile network subscriber with assistance of said connection number of said fixed network, dependent on a profile of said mobile network subscriber.

5

5. (Amended) A service logic according to claim 4, further comprising a means of informing said mobile network subscriber of a selection code that is to be additionally employed given use of said fixed network terminal device via said service.

10

6. (Amended) A service logic according to claim 4, further comprising:
means for automatically de-registering said fixed network terminal device that has been employed after expiration of a prescribable time or by an explicit de-registration procedure via said mobile telephone, resulting in a loss of a property of being able to be used by the mobile network subscriber according to said subscriber's user profile.

15

REMARKS

The present Amendment revises the specification and claims to conform to United States patent practice, before examination of the present PCT application in the United States National Examination Phase. Pursuant to 37 CFR 1.125 (b), applicants have concurrently submitted a substitute specification, excluding the claims, and provided a marked-up copy. All of the changes are editorial and applicant believes no new matter is added thereby. The amendment, addition, and/or cancellation of claims is not intended to be a surrender of any of the subject matter of those claims. Please note that the Abstract of the Substitute Specification is simply the Abstract identified on the front of the International Application sheet.

20

25

Early examination on the merits is respectfully requested.

Submitted by,

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Appendix A
Mark Ups for Claim Amendments

5 This redlined draft, generated by CompareRite (TM) - The Instant Redliner, shows
the differences between -
original document : Q:\DOCUMENTS\YEAR 2001\PO10010-MAUS-
ADMINISTERING SUBSCRIBER SERVICE\ORIGINAL CLAIMS.DOC
and revised document: Q:\DOCUMENTS\YEAR 2001\PO10010-MAUS-
ADMINISTERING SUBSCRIBER SERVICE\AMENDED CLAIMS.DOC

10 CompareRite found 71 change(s) in the text

Deletions appear as Overstrike text surrounded by []
Additions appear as Bold-Underline text

15

1. ~~[Method]~~**(Amended) A method** for administering a function of a service, ~~[in
accord wherewith]~~ **comprising the steps of:**

~~[--]~~**accepting** a request for ~~[the]~~ administration of ~~[the]~~ **said** function ~~[is
accepted]~~ via a mobile network terminal device of a mobile network subscriber;

20 ~~[--the]~~ **identifying said** mobile network subscriber ~~[is subsequently
identified;];~~

~~[--]~~**instructing**, following a successful identification, ~~[the]~~ **said** mobile network
subscriber ~~[is instructed]~~ that ~~[the]~~ **said** service should now be informed of a
connection number of a fixed network terminal device for ~~[the]~~ **said** administration of
25 ~~[the]~~ **said** function;

~~[--]~~**allocating** a connection number communicated ~~[thereupon is allocated to
the]~~ **after instructing said** mobile network subscriber **to said mobile network
subscriber; and[;]**

30 ~~[B the]~~ **controlling a** handling of a call initiated from ~~[the]~~ **said** fixed network
terminal device via ~~[the]~~ **said** service, said call being allocated to ~~[the]~~ **said** mobile
network subscriber with ~~[the]~~ assistance of ~~[the]~~ **said** connection number of ~~[the]~~
said fixed network, ~~[is controlled]~~ dependent on ~~[the]~~ **a** profile of ~~[the]~~ **said** mobile
network subscriber.

2. ~~[Method]~~**(Amended) The method** according to claim 1, ~~[characterized in that the]~~**further comprising the step of informing said** mobile network subscriber ~~[is informed]~~ of a selection code that is to be additionally employed given use of ~~[the]~~ **said** fixed network terminal device via ~~[the]~~ **said** service.

5

3. ~~[Method]~~**(Amended) The method** according to claim 1 ~~[or 2, characterized in that the]~~, **further comprising the step of automatically de-registering said** fixed network terminal device that has been employed ~~[is de-registered automatically]~~ after expiration of a prescribable time ~~[and/or]~~ **or** by an explicit de-registration procedure via ~~[the mobile telephone, as a result whereof it loses the]~~ **said mobile network terminal device, resulting in a loss of a** property of being able to be used by ~~[the]~~ **said** mobile network subscriber according to said ~~[subscriber=s]~~ **subscriber's** profile.

10

4. ~~[Service]~~**(Amended) A service** logic for ~~[the]~~ control of a service ~~[that]~~, **comprising:**

15

~~[--accepts]~~ **means for accepting** a request for administering a function of ~~[the]~~ **said** service via a mobile network terminal device of a mobile network subscriber;

20

~~[B]~~ **means for** subsequently ~~[identifies the]~~ **identifying said mobile network** subscriber;

~~[B]~~ **means for instructing,** following a successful identification, ~~[instructs the]~~ **said** mobile network subscriber that it should now be informed of a connection number of a fixed network terminal device for the administration of ~~[the]~~ **said** function;

25

~~[--allocates]~~ **means for allocating** a connection number communicated ~~[thereupon to the]~~ **after instructing said** mobile network subscriber **to said mobile network subscriber; and**

means for controlling a;

~~B then controls the~~ handling of a call initiated from ~~the~~ said fixed network terminal device via ~~the~~ said service, said call being allocated to ~~the~~ said mobile network subscriber with ~~the~~ assistance of ~~the~~ said connection number of ~~the~~ said fixed network, dependent on ~~the~~ a profile of ~~the~~ said mobile network subscriber.

5

5. ~~{Service}~~(Amended) A service logic according to claim ~~6~~ ~~[sic]~~, characterized in that it informs ~~the~~ 4, further comprising a means of informing said mobile network subscriber of a selection code that is to be additionally employed given use of ~~the~~ said fixed network terminal device via ~~the~~ said service.

10

6. ~~{Service}~~(Amended) A service logic according to claim 4 ~~or 5~~, characterized in that it ~~de-registers the~~, further comprising: means for automatically de-registering said fixed network terminal device that has been employed ~~[automatically]~~ after expiration of a prescribable time ~~[and/or]~~ or by an explicit de-registration procedure via ~~the~~ said mobile telephone, ~~[as a result whereof it loses the]~~ resulting in a loss of a property of being able to be used by the mobile network subscriber according to said ~~[subscriber=s]~~ subscriber's user profile.

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09/762259

1. PCT/PTO 2. FEB 2001

JC05 Rec'd PCT/PTO 0 2 FEB 2001

Siemens AG
New PCT application
26965-0858 (P-01,0010)
1998P02238WOUS
Inventor: Maus

Translation / January 12, 2001 / 1696(911) / 1850 words

METHOD FOR ADMINISTERING A SERVICE FOR A SUBSCRIBER

For using an FMC service (FMC: fixed-mobile converged), the subscriber must be unambiguously identified and authorized (for example, in order to be able to carry out a correct charging). Given fixed-mobile converged services such as, for example, PCS (personal communication service) and CCS (corporate communication service), the service user sometimes employs a mobile terminal device and sometimes employs a fixed network terminal device.

In the mobile radiotelephone network, the unambiguous identification of the subscriber ensues automatically via the SIM card (SIM: subscriber identity module). The identification of the subscriber can also ensue automatically in the fixed network when the subscriber uses a terminal device that is administratively known to the FMC service and that is allocated to the subscriber, and when the fixed network supplies the calling line identity (connection number) of this fixed network terminal device to the FMC service logic.

Given employment of an arbitrary fixed network terminal (i.e. a fixed network terminal that was not administratively allocated to the subscriber by the FMC service), an automatic identification of the subscriber is not possible. However, a registration at one's own fixed network terminal device for employing this terminal device via a specific FMC service is also not possible, even though this would be meaningful in certain cases (for example, for teleworkers when specific calls from the connection are to be at the expense of the company (CCS service)).

Up to now, the fixed network has supported the use of outside terminals at one's own expense or, respectively, of one's own terminal at the expense of a third party only via the possibility of identifying and authenticating the calling party by means of an in-band dialogue. To that end, the calling party (for example, an IN service subscriber) must input a personal identification number (PIN) that the service logic compares to data stored in the network (for example, given credit card services or given UPT). Such a Prior Art is known, for example, from the document EP-A-0 602 779.

The document WO 98 09425 A, further, discloses a system for handling calls with whose assistance a fixed network terminal device that is to be employed for the continuation of the call can be indicated given an initiation of a call via a mobile
5 network terminal device.

The document EP-A-0844 799, finally, discloses a communication system for handling calls with whose assistance a mobile network subscriber can indicate via said subscriber's mobile network terminal device whether calls directed to said subscriber should be routed to a prescribable fixed network terminal device.

10 The invention is based on the object of facilitating the employability of a fixed network terminal device via a specific service for a mobile network subscriber.

An exemplary embodiment of the invention is explained in greater detail below with reference to the drawing, whereby the drawing comprises one Figure.

The Figure represents an exemplary configuration wherein the realization of the inventive service logic is based on an intelligent network IN. An inventive
5 FMC service, however, need not necessarily be realized on a service control point SCP of an IN.

Given an FMC service whose service logic is realized in a service control point SCP, the caller has a mobile telephone GSM available. Given an access of the subscriber to the FMC service via the mobile telephone, the FMC service logic
10 receives the mobile radiotelephone number MSISDN of the FMC service subscriber that is administratively known to the FMC service logic and that was authenticated in the mobile radiotelephone network PLMN (given an IN-based FMC service, for example, the mobile radiotelephone number of the FMC service subscriber is transmitted in the CallingPartyNumber parameter of the standardized IN protocol, see
15 ETSI Core INAP or ITU-T Recommendations Q.1218/Q.1228). The FMC service logic can automatically identify and authorize the FMC subscriber on the basis of the subscriber's mobile radiotelephone number.

This can be utilized by the subscriber of the FMC service for the use of an arbitrary fixed network terminal device in a fully digital fixed network PSTN that
20 transmits the CallingLineIdentity in order to avoid the employment of a PIN. The procedure for this is as follows:

Phase 1:

The subscriber selects an FMC service access code at the mobile telephone GSM. The access request is potentially forwarded to the FMC service across network
25 boundaries (here, from a mobile network PLMN via a digital fixed network PSTN). The FMC service automatically identifies the subscriber on the basis of the subscriber's mobile radiotelephone number MSISDN. In response thereto, the FMC service initiates that the subscriber should now inform the service of a connection number of a fixed network terminal device. Via voice or DTMF input, the subscriber
30 enters the CallingLineIdentity of the fixed network terminal device that he would like

to use at his own expense for outgoing calls or other line-switched services (for example, data transmission) for a definable time duration or, respectively, until an explicit de-registration. The FMC service subsequently registers the terminal device and assigns it to the subscriber. Optionally, the FMC service can communicate a selection code to the subscriber that is to be additionally employed given utilization of this fixed network terminal device (the service can distinguish between a plurality of inventive outside users of the fixed network terminal device on the basis of the selection code).

Phase 2:

The subscriber selects a specific FMC service access code at the fixed network terminal device and, optionally, an additional, temporary selection code before the destination telephone number. The FMC service access number is triggered in the fixed network and an inquiry is made at the FMC service logic (for example, with the existing IN procedures). This identifies the FMC service subscriber on the basis of the CallingLineIdentity of the fixed network terminal device registered in phase 1 that is co-supplied in a fully digital fixed network and – optionally – also on the basis of the temporary selection code in the selected numbers (INAP parameter CalledPartyNumber), and decides about further handling of the call (for example, charge accrual) on the basis of the FMC service subscriber profile). The FMC service logic controls the further handling of the call (for example, according to the existing IN procedures). The freedom from cost for the owner of the fixed network terminal can be assured on the basis of the selected, specific FMC service access code in the fixed network subscriber switching center on the basis of administrative data or controlled by the FMC service logic (for example, with the assistance of existing IN procedures).

The FMC service subscriber can also use the registered fixed network terminal device for subsequent calls in the same way without requiring a separate PIN therefor, namely until a de-registration ensues.

Phase 3:

Either automatically after the expiration of a prescribable time and/or by an explicit de-registration procedure via the mobile telephone, the fixed network terminal device that has been employed loses the property of being able to be used by the FMC service subscriber at the subscriber's own expense or, respectively, of being able to be used by the FMC service subscriber at the expense of a third party. (Given an explicit de-registration procedure, which is again to be implemented via the mobile network terminal device, analogous to the registration procedure, the FMC service checks whether there is already a registration for the CallingLineIdentity indicated by the subscriber. When this is the case, the de-registration is implemented.)

The administration of subscriber-individual PINs for the use of arbitrary fixed network terminals is thus superfluous for FMC services.

FMC service sub-functions other than the described method for using arbitrary fixed network terminals can also be administered without the employment of a PIN by the subscriber when the subscriber implements the administration only via his mobile radiotelephone. The required subscriber identification is carried out by the mobile radiotelephone network in the same way as described for the method for using arbitrary fixed network terminals. Subscriber-individual PINs can thus be generally foregone in FMC services when all subscriber inputs for administration of services ensue only via the subscriber's mobile radiotelephone.

Abbreviations Employed:

BTS	: base transceiver system
BSC	: base station controller
HLR/AC	: home location register / authentication center
25 IN	: intelligent network
INAP	: In application protocol
ISUP	: ISDN user part
LEX-SSP	: Local exchange with SSP functionality
MSC-SSP	: Mobile switching center with SSP functionality
30 MAP	: mobile application part

PSTN: : Public switched telephone network
PLMN : public land mobile network
SSP : service switching point

Patent Claims

1. Method for administering a function of a service, in accord wherewith
 - a request for the administration of the function is accepted via a mobile network terminal device of a mobile network subscriber;
 - 5 -- the mobile network subscriber is subsequently identified;
 - following a successful identification, the mobile network subscriber is instructed that the service should now be informed of a connection number of a fixed network terminal device for the administration of the function;
 - a connection number communicated thereupon is allocated to the mobile network subscriber;
 - 10 -- the handling of a call initiated from the fixed network terminal device via the service, said call being allocated to the mobile network subscriber with the assistance of the connection number of the fixed network , is controlled dependent on the profile of the mobile network subscriber.
- 15 2. Method according to claim 1, characterized in that the mobile network subscriber is informed of a selection code that is to be additionally employed given use of the fixed network terminal device via the service.
3. Method according to claim 1 or 2, characterized in that the fixed network terminal device that has been employed is de-registered automatically after
 - 20 expiration of a prescribable time and/or by an explicit de-registration procedure via the mobile telephone, as a result whereof it loses the property of being able to be used by the mobile network subscriber according to said subscriber's profile.
4. Service logic for the control of a service that
 - accepts a request for administering a function of the service via a mobile network terminal device of a mobile network subscriber;
 - 25 -- subsequently identifies the subscriber;
 - following a successful identification, instructs the mobile network subscriber that it should now be informed of a connection number of a fixed network terminal device for the administration of the function;
 - 30 -- allocates a connection number communicated thereupon to the mobile network subscriber;

— then controls the handling of a call initiated from the fixed network terminal device via the service, said call being allocated to the mobile network subscriber with the assistance of the connection number of the fixed network , dependent on the profile of the mobile network subscriber.

5 5. Service logic according to claim 6 [sic], characterized in that it informs the mobile network subscriber of a selection code that is to be additionally employed given use of the fixed network terminal device via the service.

10 6. Service logic according to claim 4 or 5, characterized in that it de-registers the fixed network terminal device that has been employed automatically after expiration of a prescribable time and/or by an explicit de-registration procedure via the mobile telephone, as a result whereof it loses the property of being able to be used by the mobile network subscriber according to said subscriber's user profile.

SPECIFICATION

TITLE

METHOD FOR ADMINISTERING A SERVICE FOR A SUBSCRIBER

5

BACKGROUND OF THE INVENTION

Field of the Invention

1 The invention relates to a method and associated logic for administering a function of a service in a telecommunications network.

10 Description of the Related Art

2 For using an FMC (fixed-mobile converged) service, the subscriber must be unambiguously identified and authorized (for example, in order to be able to carry out a correct charging). For fixed-mobile converged services such as PCS (personal communication service) and CCS (corporate communication service), the service
15 user sometimes employs a mobile terminal device and sometimes employs a fixed network terminal device.

3 In the mobile radiotelephone network, the unambiguous identification of the subscriber ensues automatically via a SIM (subscriber identity module) card. The identification of the subscriber can also ensue automatically in the fixed network
20 when the subscriber uses a terminal device that is administratively known to the FMC service and that is allocated to the subscriber, and when the fixed network supplies the calling line identity (connection number) of this fixed network terminal device to the FMC service logic.

4 When using an arbitrary fixed network terminal (i.e., a fixed network terminal
25 that was not administratively allocated to the subscriber by the FMC service), an automatic identification of the subscriber is not possible. However, a registration at one's own fixed network terminal device for employing this terminal device via a specific FMC service is also not possible, even though this would be meaningful in certain cases (for example, for teleworkers when specific calls from the connection
30 are to be at the expense of the company (CCS service)).

5 Up to now, the fixed network has supported the use of outside terminals at

one's own expense or of one's own terminal at the expense of a third party only via the possibility of identifying and authenticating the calling party via an in-band dialogue. To that end, the calling party (for example, an IN service subscriber) must input a personal identification number (PIN) that the service logic compares to data stored in the network (for example, for credit card services or for UPT). Such prior art is known, for example, from the European Patent document EP-A-0 602 779.

6 Furthermore, the International Patent document WO 98 09425 A discloses a system for handling calls with whose assistance a fixed network terminal device that is to be employed for the continuation of the call can be indicated given an initiation of a call via a mobile network terminal device.

7 Finally, the European Patent document EP-A-0844 799 discloses a communication system for handling calls with whose assistance a mobile network subscriber can indicate via said subscriber's mobile network terminal device whether calls directed to this subscriber should be routed to a prescribable fixed network terminal device.

SUMMARY OF THE INVENTION

8 The invention is based on the object of facilitating the employability of a fixed network terminal device via a specific service for a mobile network subscriber.

BRIEF DESCRIPTION OF THE DRAWINGS

9 An exemplary embodiment of the invention is explained in greater detail below with reference to the single Figure, which is a block schematic diagram showing the inventive arrangement.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

10 The Figure represents an exemplary configuration in which the realization of the inventive service logic is based on an intelligent network IN. An inventive FMC service, however, need not necessarily be realized on a service control point SCP of an IN.

11 For an FMC service whose service logic is realized in a service control point SCP, the caller has a mobile telephone GSM available. For an access of the

subscriber to the FMC service via the mobile telephone, the FMC service logic receives the mobile radiotelephone number MSISDN of the FMC service subscriber that is administratively known to the FMC service logic and that was authenticated in the mobile radiotelephone network PLMN (given an IN-based FMC service, for example, the mobile radiotelephone number of the FMC service subscriber is transmitted in the CallingPartyNumber parameter of the standardized IN protocol, see ETSI Core INAP or ITU-T Recommendations Q.1218/Q.1228). The FMC service logic can automatically identify and authorize the FMC subscriber on the basis of the subscriber's mobile radiotelephone number.

12 This can be utilized by the subscriber of the FMC service for the use of an arbitrary fixed network terminal device in a fully digital fixed network PSTN that transmits the CallingLineIdentity in order to avoid the employment of a PIN. The procedure for this is as follows:

Phase 1:

13 The subscriber selects an FMC service access code at the mobile telephone GSM. The access request is potentially forwarded to the FMC service across network boundaries (here, from a mobile network PLMN via a digital fixed network PSTN). The FMC service automatically identifies the subscriber on the basis of the subscriber's mobile radiotelephone number MSISDN. The FMC service responds by initiating that the subscriber should now inform the service of a connection number of a fixed network terminal device. Via voice or DTMF input, the subscriber enters the CallingLineIdentity of the fixed network terminal device that he would like to use at his own expense for outgoing calls or other line-switched services (for example, data transmission) for a definable time duration or, respectively, until an explicit de-registration. The FMC service subsequently registers the terminal device and assigns it to the subscriber. Optionally, the FMC service can communicate a selection code to the subscriber that is to be additionally employed for utilization of this fixed network terminal device (the service can distinguish between a plurality of inventive outside users of the fixed network terminal device on the basis of the selection code).

Phase 2:

- 14 The subscriber selects a specific FMC service access code at the fixed network terminal device and, optionally, an additional, temporary selection code
- 5 before the destination telephone number. The FMC service access number is triggered in the fixed network and an inquiry is made at the FMC service logic (for example, with the existing IN procedures). This identifies the FMC service subscriber on the basis of the CallingLineIdentity of the fixed network terminal device registered in Phase 1 that is co-supplied in a fully digital fixed network and
- 10 (optionally) also on the basis of the temporary selection code in the selected numbers (INAP parameter CalledPartyNumber), and decides about further handling of the call (for example, charge accrual) on the basis of the FMC service subscriber profile). The FMC service logic controls the further handling of the call (for example, according to the existing IN procedures). The freedom from cost for the owner of the
- 15 fixed network terminal can be assured on the basis of the selected, specific FMC service access code in the fixed network subscriber switching center on the basis of administrative data or controlled by the FMC service logic (for example, with the assistance of existing IN procedures).
- 15 The FMC service subscriber can also use the registered fixed network
- 20 terminal device for subsequent calls in the same way without requiring a separate PIN, namely until a de-registration takes place.

Phase 3:

- 16 Either automatically after the expiration of a prescribable time and/or by an
- 25 explicit de-registration procedure via the mobile telephone, the fixed network terminal device that has been employed loses the property of being able to be used by the FMC service subscriber at the subscriber's own expense or of being able to be used by the FMC service subscriber at the expense of a third party.)For an explicit de-registration procedure, which is again to be implemented via the mobile
- 30 network terminal device, analogous to the registration procedure, the FMC service

checks whether there is already a registration for the CallingLineIdentity indicated by the subscriber. When this is the case, the de-registration is implemented.)

17 The administration of subscriber-individual PINs for the use of arbitrary fixed network terminals is thus superfluous for FMC services.

5 18 FMC service sub-functions other than the described method for using arbitrary fixed network terminals can also be administered without the employment of a PIN by the subscriber when the subscriber implements the administration only via his mobile radiotelephone. The required subscriber identification is carried out by the mobile radiotelephone network in the same way as described for the method
10 for using arbitrary fixed network terminals. Subscriber-individual PINs can thus be generally foregone in FMC services when all subscriber inputs for administration of services ensue only via the subscriber's mobile radiotelephone.

19 The above-described method and associated logic are illustrative of the principles of the present invention. Numerous modifications and adaptations thereof
15 will be readily apparent to those skilled in this art without departing from the spirit and scope of the present invention.

This redlined draft, generated by CompareRite (TM) - The Instant Redliner, shows the differences between -
original document : Q:\DOCUMENTS\YEAR 2001\PO10010-MAUS-
ADMINISTERING SUBSCRIBER SERVICE\ORIGINAL SPECIFICATION.DOC
5 and revised document: Q:\DOCUMENTS\YEAR 2001\PO10010-MAUS-
ADMINISTERING SUBSCRIBER SERVICE\SUBSTITUTE SPECIFICATION.DOC

CompareRite found 53 change(s) in the text

10 Deletions appear as Overstrike text surrounded by []
Additions appear as Bold-Underline text

SPECIFICATION

TITLE

15 METHOD FOR ADMINISTERING A SERVICE FOR A SUBSCRIBER

BACKGROUND OF THE INVENTION

Field of the Invention

20 **1 The invention relates to a method and associated logic for administering a function of a service in a telecommunications network.**

Description of the Related Art

25 **2** For using an FMC ~~{service (FMC:)}~~**(fixed-mobile converged) service**, the subscriber must be unambiguously identified and authorized (for example, in order to be able to carry out a correct charging). ~~[Given]~~ **For** fixed-mobile converged services such as~~[, for example,]~~ PCS (personal communication service) and CCS (corporate communication service), the service user sometimes employs a mobile terminal device and sometimes employs a fixed network terminal device.

30 **3** In the mobile radiotelephone network, the unambiguous identification of the subscriber ensues automatically via ~~[the]~~ **a SIM [card (SIM:)]**~~(subscriber identity module) card~~. The identification of the subscriber can also ensue automatically in the fixed network when the subscriber uses a terminal device that is administratively known to the FMC service and that is allocated to the subscriber, and when the fixed network supplies the calling line identity (connection number) of this fixed network
35 terminal device to the FMC service logic.

~~[Given employment of]~~ **4 When using** an arbitrary fixed network terminal (i.e., a fixed network terminal that was not administratively allocated to the subscriber by the

FMC service), an automatic identification of the subscriber is not possible. However, a registration at one's own fixed network terminal device for employing this terminal device via a specific FMC service is also not possible, even though this would be meaningful in certain cases (for example, for teleworkers when specific calls from the connection are to be at the expense of the company (CCS service)).

5 Up to now, the fixed network has supported the use of outside terminals at one's own expense or ~~[, respectively,]~~ of one's own terminal at the expense of a third party only via the possibility of identifying and authenticating the calling party ~~[by means of]~~ via an in-band dialogue. To that end, the calling party (for example, an IN service subscriber) must input a personal identification number (PIN) that the service logic compares to data stored in the network (for example, ~~[given]~~ for credit card services or ~~[given]~~ for UPT). Such ~~[a Prior Art]~~ prior art is known, for example, from the European Patent document EP-A-0 602 779.

~~[The]~~ **6** Furthermore, the International Patent document WO 98 09425 A~~;~~ ~~further,]~~ discloses a system for handling calls with whose assistance a fixed network terminal device that is to be employed for the continuation of the call can be indicated given an initiation of a call via a mobile network terminal device.

~~[The]~~ **7** Finally, the European Patent document EP-A-0844 799~~;~~ ~~finally,]~~ discloses a communication system for handling calls with whose assistance a mobile network subscriber can indicate via said subscriber's mobile network terminal device whether calls directed to ~~[said]~~ this subscriber should be routed to a prescribable fixed network terminal device.

SUMMARY OF THE INVENTION

8 The invention is based on the object of facilitating the employability of a fixed network terminal device via a specific service for a mobile network subscriber.

BRIEF DESCRIPTION OF THE DRAWINGS

9 An exemplary embodiment of the invention is explained in greater detail below with reference to the ~~[drawing, whereby the drawing comprises one Figure.~~

10 single Figure, which is a block schematic diagram showing the inventive arrangement.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

10 The Figure represents an exemplary configuration ~~[wherein]~~ **in which** the realization of the inventive service logic is based on an intelligent network IN. An inventive FMC service, however, need not necessarily be realized on a service control point SCP of an IN.

5 ~~[Given]~~ **11** **For** an FMC service whose service logic is realized in a service control point SCP, the caller has a mobile telephone GSM available. ~~[Given]~~ **For** an access of the subscriber to the FMC service via the mobile telephone, the FMC service logic receives the mobile radiotelephone number MSISDN of the FMC service subscriber that is administratively known to the FMC service logic and that was authenticated in
10 the mobile radiotelephone network PLMN (given an IN-based FMC service, for example, the mobile radiotelephone number of the FMC service subscriber is transmitted in the CallingPartyNumber parameter of the standardized IN protocol, see ETSI Core INAP or ITU-T Recommendations Q.1218/Q.1228). The FMC service logic can automatically identify and authorize the FMC subscriber on the
15 basis of the ~~[subscriber=s]~~ **subscriber's** mobile radiotelephone number.

12 This can be utilized by the subscriber of the FMC service for the use of an arbitrary fixed network terminal device in a fully digital fixed network PSTN that transmits the CallingLineIdentity in order to avoid the employment of a PIN. The procedure for this is as follows:

20 Phase 1:

13 The subscriber selects an FMC service access code at the mobile telephone GSM. The access request is potentially forwarded to the FMC service across network boundaries (here, from a mobile network PLMN via a digital fixed network
25 PSTN). The FMC service automatically identifies the subscriber on the basis of the ~~[subscriber=s]~~ **subscriber's** mobile radiotelephone number MSISDN. ~~[In response thereto, the]~~ **The FMC service [initiates] responds by initiating** that the subscriber should now inform the service of a connection number of a fixed network terminal device. Via voice or DTMF input, the subscriber enters the CallingLineIdentity of the
30 fixed network terminal device that he would like to use at his own expense for outgoing calls or other line-switched services (for example, data transmission) for a definable time duration or, respectively, until an explicit de-registration. The FMC service subsequently registers the terminal device and assigns it to the subscriber.

Optionally, the FMC service can communicate a selection code to the subscriber that is to be additionally employed ~~[given]~~ **for** utilization of this fixed network terminal device (the service can distinguish between a plurality of inventive outside users of the fixed network terminal device on the basis of the selection code).

5

Phase 2:

14 The subscriber selects a specific FMC service access code at the fixed network terminal device and, optionally, an additional, temporary selection code before the destination telephone number. The FMC service access number is triggered in the fixed network and an inquiry is made at the FMC service logic (for example, with the existing IN procedures). This identifies the FMC service subscriber on the basis of the CallingLineIdentity of the fixed network terminal device registered in ~~[phase]~~ **Phase 1** that is co-supplied in a fully digital fixed network and ~~[B optionally B]~~ **(optionally)** also on the basis of the temporary selection code in the selected numbers (INAP parameter CalledPartyNumber), and decides about further handling of the call (for example, charge accrual) on the basis of the FMC service subscriber profile). The FMC service logic controls the further handling of the call (for example, according to the existing IN procedures). The freedom from cost for the owner of the fixed network terminal can be assured on the basis of the selected, specific FMC service access code in the fixed network subscriber switching center on the basis of administrative data or controlled by the FMC service logic (for example, with the assistance of existing IN procedures).

15 The FMC service subscriber can also use the registered fixed network terminal device for subsequent calls in the same way without requiring a separate ~~[PIN therefor]~~ **PIN**, namely until a de-registration ~~[ensues]~~ **takes place**.

25

Phase 3:

16 Either automatically after the expiration of a prescribable time and/or by an explicit de-registration procedure via the mobile telephone, the fixed network terminal device that has been employed loses the property of being able to be used by the FMC service subscriber at the ~~[subscriber=s]~~ **subscriber's** own expense or, ~~respectively,~~ of being able to be used by the FMC service subscriber at the expense of a third party. ~~[(Given)]~~ **For** an explicit de-registration procedure, which is again to

30

be implemented via the mobile network terminal device, analogous to the registration procedure, the FMC service checks whether there is already a registration for the CallingLineIdentity indicated by the subscriber. When this is the case, the de-registration is implemented.)

5 **17** The administration of subscriber-individual PINs for the use of arbitrary fixed network terminals is thus superfluous for FMC services.

10 **18** FMC service sub-functions other than the described method for using arbitrary fixed network terminals can also be administered without the employment of a PIN by the subscriber when the subscriber implements the administration only via his mobile radiotelephone. The required subscriber identification is carried out by the mobile radiotelephone network in the same way as described for the method for using arbitrary fixed network terminals. Subscriber-individual PINs can thus be generally foregone in FMC services when all subscriber inputs for administration of services ensue only via the {subscriber=s} **subscriber's** mobile radiotelephone.

15 ~~[Abbreviations Employed:]~~ **19 The above-described method and associated logic are illustrative of the principles of the present invention. Numerous modifications and adaptations thereof will be readily apparent to those skilled in this art without departing from the spirit and scope of the present invention.**

[BTS : base transceiver system] **ABSTRACT**

[BSC : base station controller

HLR/AC : home location register / authentication center

IN : intelligent network

5 INAP : In application protocol

ISUP : ISDN user part

LEX-SSP : Local exchange with SSP functionality

MSC-SSP : Mobile switching center with SSP functionality

MAP : mobile application part

10 PSTN : : Public switched telephone network

PLMN : public land mobile network

SSP : service switching point] **20 The invention prevents the need for a**

subscriber to input a PIN to book a service with the purpose of managing this

service from the subscriber side. This is achieved by using a mobile network

15 **terminal for the management. The mobile subscriber reports a subscriber**

number of a fixed network terminal to the service, in which the subscriber

number thus reported is allocated to the mobile network subscriber so that the

mobile network subscriber can thereafter use the fixed network terminal for

the special service, namely by debiting an account opened by the service.

ABSTRACT

20 The invention prevents the need for a subscriber to input a PIN to book a service with the purpose of managing this service from the subscriber side. This is achieved by using a mobile network terminal for the management. The mobile
5 subscriber reports a subscriber number of a fixed network terminal to the service, in which the subscriber number thus reported is allocated to the mobile network subscriber so that the mobile network subscriber can thereafter use the fixed network terminal for the special service, namely by debiting an account opened by the service.

09/762259

JC05 Rec'd PCT/PTO 02 FEB 2001

BOX PCT

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE
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UNDER THE PATENT COOPERATION TREATY--CHAPTER II

APPLICANT(S): RENATE ZYGAN-MAUS
ATTORNEY DOCKET NO.: P01,0010
INTERNATIONAL APPLICATION NO: PCT/EP99/05651
INTERNATIONAL FILING DATE: 04 AUGUST 1999
INVENTION: METHOD FOR ADMINISTERING A SERVICE FOR A
SUBSCRIBER

Assistant Commissioner for Patents,
Washington, D.C. 20231

REQUEST FOR APPROVAL OF DRAWING ADDITIONS

Sir:

Enclosed is 1 sheet of drawings, Single Figure, showing in red,
the addition of labels to the elements depicted therein. Approval of the
additions is respectfully requested.

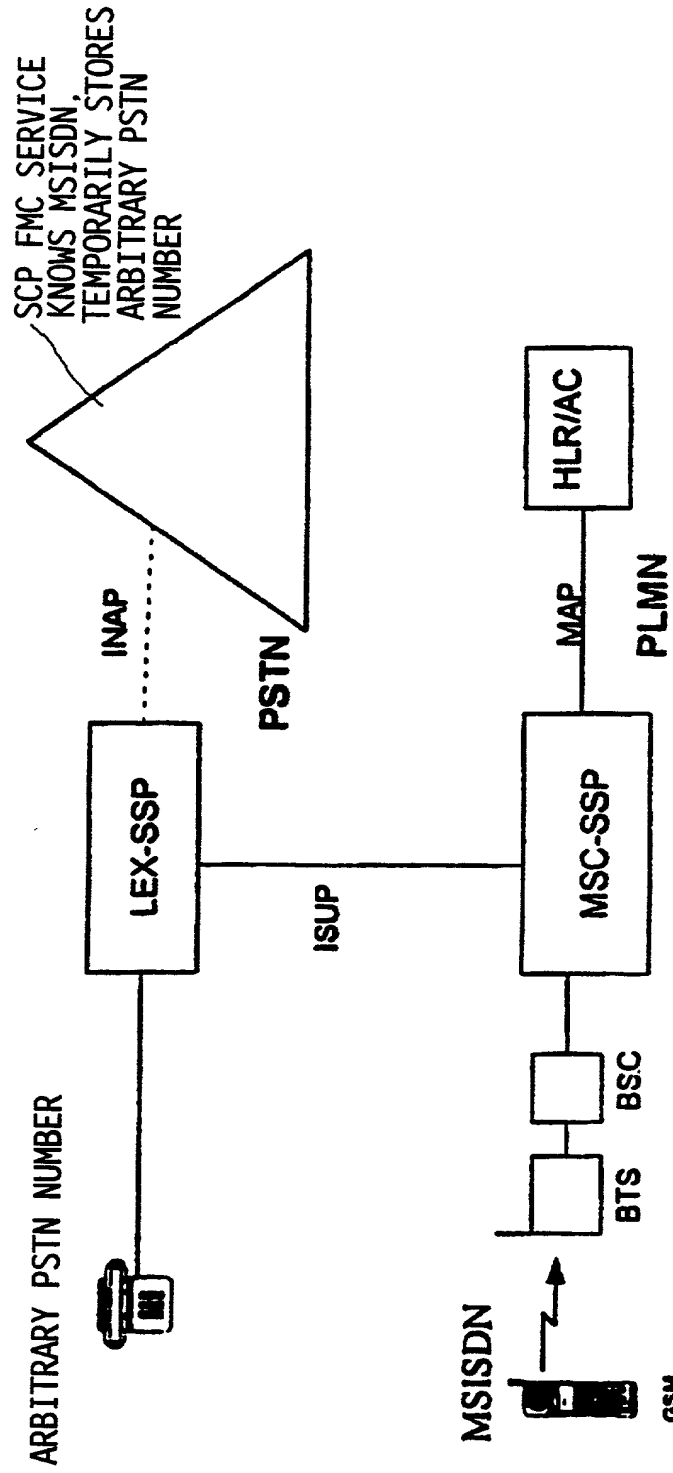
Submitted by,



(Reg. No. 45,877)

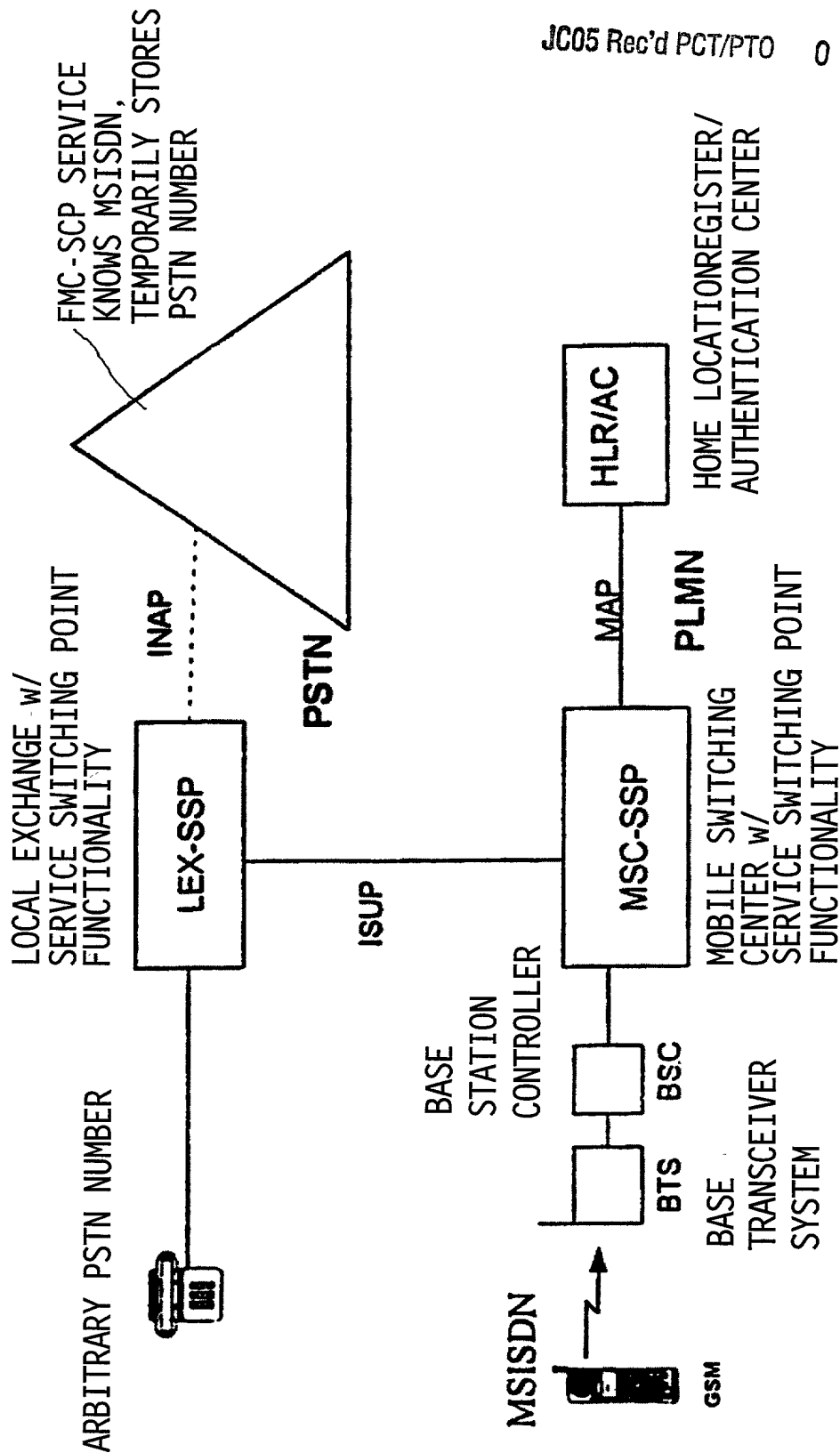
Mark Bergner
SCHIFF HARDIN & WAITE
PATENT DEPARTMENT
6600 Sears Tower
Chicago, Illinois 60606-6473
(312) 258-5779
Attorney for Applicant(s)
CUSTOMER NUMBER 26574

EXEMPLARY CONFIGURATION



FIGURE

EXEMPLARY CONFIGURATION



FIGURE

Declaration and Power of Attorney For Patent Application**Erklärung Für Patentanmeldungen Mit Vollmacht****German Language Declaration**

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,

dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent beantragt wird für die Erfindung mit dem Titel:

Verfahren zum Administrieren eines Dienstes für einen Teilnehmer

deren Beschreibung

(zutreffendes ankreuzen)

☒ hier beigefügt ist.

☐ am _____ als

PCT internationale Anmeldung

PCT Anwendungsnummer _____

eingereicht wurde und am _____

abgeändert wurde (falls tatsächlich abgeändert).

Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde.

Ich erkenne meine Pflicht zur Offenbarung irgendwelcher Informationen, die für die Prüfung der vorliegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind, an.

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde nachstehend gekennzeichnet, die ein Anmeldedatum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.

As a below named inventor, I hereby declare that.

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

the specification of which

(check one)

☐ is attached hereto.

☐ was filed on _____ as

PCT international application

PCT Application No. _____

and was amended on _____

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

German Language Declaration

Prior foreign applications
Priorität beansprucht

Priority Claimed

98114751.5 Germany 05. August 1998
(Number) (Country) (Day Month Year Filed)
(Nummer) (Land) (Tag Monat Jahr eingereicht)

☒ ☐
Yes No
Ja Nein

(Number) (Country) (Day Month Year Filed)
(Nummer) (Land) (Tag Monat Jahr eingereicht)

☐ ☐
Yes No
Ja Nein

(Number) (Country) (Day Month Year Filed)
(Nummer) (Land) (Tag Monat Jahr eingereicht)

☐ ☐
Yes No
Ja Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmeldungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35 United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

(Application Serial No.)
(Anmeldeseriennummer)

(Filing Date)
(Anmeldedatum)

(Status)
(patentiert, anhängig,
aufgegeben)

(Status)
(patented, pending,
abandoned)

(Application Serial No.)
(Anmeldeseriennummer)

(Filing Date)
(Anmeldedatum)

(Status)
(patentiert, anhängig,
aufgeben)

(Status)
(patented, pending,
abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegenden Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklärung in Kenntnis dessen abgebe, dass wissentlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozessordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden koennen, und dass derartig wissentlich und vorsätzlich falsche Angaben die Gültigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon

German Language Declaration

VERTRETUNGSVOLLMACHT: Als benannter Erfinder beauftrage ich hiermit den nachstehend benannten Patentanwalt (oder die nachstehend benannten Patentanwälte) und/oder Patent-Agenten mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Geschäfte vor dem Patent- und Warenzeichenamt: *(Name und Registrationsnummer anführen)*

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. *(list name and registration number)*

And I hereby appoint

Messrs. John D. Simpson (Registration No. 19,842) Lewis T. Steadman (17,074), William C. Stueber (16,453), P. Phillips Connor (19,259), Dennis A. Gross (24,410), Marvin Moody (16,549), Steven H. Noll (28,982), Brett A. Valiquet (27,841), Thomas I. Ross (29,275), Kevin W. Guynn (29,927), Edward A. Lehmann (22,312), James D. Hobart (24,149), Robert M. Barrett (30,142), James Van Santen (16,584), J. Arthur Gross (13,615), Richard J. Schwarz (13,472) and Melvin A. Robinson (31,870), David R. Metzger (32,919), John R. Garrett (27,888) all members of the firm of Hill, Steadman & Simpson, A Professional Corporation.

Telefongespräche bitte richten an:
(Name und Telefonnummer)

Direct Telephone Calls to: *(name and telephone number)*

312/876-0200
Ext. _____

Postanschrift:

Send Correspondence to:

HILL, STEADMAN & SIMPSON
A Professional Corporation
85th Floor Sears Tower, Chicago, Illinois 60606

Voller Name des einzigen oder ursprünglichen Erfinders: ZYGAN-MAUS, Renate	Full name of sole or first inventor:
Unterschrift des Erfinders <i>Renate Zygán Maus</i>	Inventor's signature
Datum 16.8.99	Date
Wohnsitz D-81477 München, Germany	Residence
Staatsangehörigkeit DEU	Citizenship
Bundesrepublik Deutschland	
Postanschrift Glötzleweg 35	Post Office Address
D-81477 München	
Bundesrepublik Deutschland	
Voller Name des zweiten Miterfinders (falls zutreffend):	Full name of second joint inventor, if any:
Unterschrift des Erfinders	Second Inventor's signature
Datum	Date
Wohnsitz	Residence
Staatsangehörigkeit	Citizenship
Postanschrift	Post Office Address

(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).

(Supply similar information and signature for third and subsequent joint inventors).

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UNDER THE PATENT COOPERATION TREATY--CHAPTER II

APPLICANT(S): RENATE ZYGAN-MAUS
ATTORNEY DOCKET NO.: P01,0010
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INTERNATIONAL FILING DATE: 04 AUGUST 1999
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SUBSCRIBER

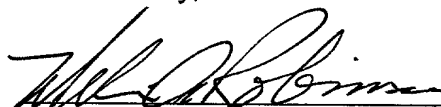
Assistant Commissioner for Patents,
Washington D.C. 20231

APPOINTMENT OF ASSOCIATE POWER OF ATTORNEY

Dear Sir:

I am an attorney designated on the Power of Attorney for the
above-referenced application. I hereby appoint Mark Bergner
(Reg. No. 45,877) as an associate attorney, with full power of substitution
and revocation, to prosecute this application and to transact all business
in the Patent and Trademark Office connected therewith.

Submitted by,

 (Reg. No. 31,870)

Melvin A. Robinson
SCHIFF HARDIN & WAITE
PATENT DEPARTMENT
6600 Sears Tower
Chicago, Illinois 60606-6473
(312) 258-5785
Attorney for Applicant(s)
CUSTOMER NUMBER 26574

09/762259

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UNDER THE PATENT COOPERATION TREATY-CHAPTER II

CHANGE OF ADDRESS OF APPLICANTS' REPRESENTATIVE

APPLICANT(S): RENATE ZYGAN-MAUS
ATTORNEY DOCKET NO.: P01,0010
INTERNATIONAL APPLICATION NO: PCT/EP99/05651
INTERNATIONAL FILING DATE: 04 AUGUST 1999
INVENTION: METHOD FOR ADMINISTERING A SERVICE FOR A SUBSCRIBER

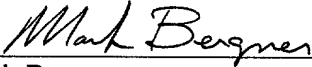
Assistant Commissioner for Patents,
Washington D.C. 20231

S I R:

Members of the firm of Hill & Simpson designated on the original Power of Attorney have merged into the firm of Schiff Hardin & Waite. All future correspondence for the above-referenced application therefore should be sent to the following address:

SCHIFF HARDIN & WAITE
Patent Department
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233 South Wacker Drive
Chicago, Illinois 60606-6473
CUSTOMER NUMBER 26574

Submitted by,


Mark Bergner (Reg. No. 45,877)
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6600 Sears Tower
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Telephone: (312) 258-5779
Attorneys for Applicants
CUSTOMER NUMBER 26574